

TRANSFORMING THE WORLD. DRIVING THE NATION'S COMPETITIVENESS. LEADING INTO THE FUTURE.

# The Impact of NITRD

Two Decades of Game-Changing Breakthroughs in Networking  
and Information Technology — Expanding Possibilities Ahead

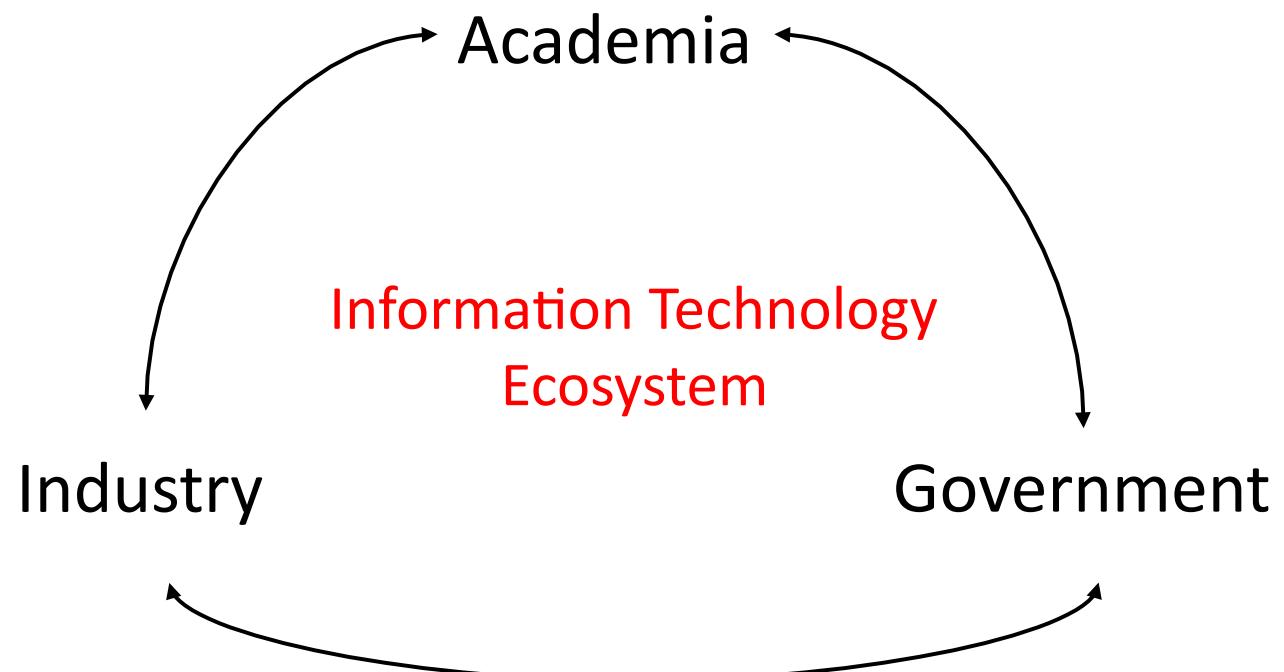


## A Day in Your Life

Jeannette M. Wing

President's Professor of Computer Science and Department Head  
Carnegie Mellon University





**Canon**



# Economic Impact

**ORACLE**



**Walmart**  
Save money. Live better.

**DELL™**

**Google**

**FedEx**

**SanDisk**



**at&t**

**nVIDIA.**

**YAHOO!**

**Microsoft**

**intel**  
Leap ahead™

**verizon**

**redhat**

**CISCO**



**A**

**Adobe**

**MW**

ARROW ELECTRONICS, INC.



**FLEXTRONICS**  
Where people make the difference



**Netscape**

**Sun**  
microsystems

**Sprint**

**EDS**

**ANALOG  
DEVICES**

**BROADCOM**

**MOTOROLA**

**AMD**  
Smarter Choice

**Alcatel-Lucent**

**Agilent Technologies**

**QUALCOMM**

**TANDEM COMPUTERS**

**Gateway**

 Intuit

## Societal Impact

 iRobot® LinkedIn® NETFLIX twitter ebay® amazon.com foursquare flickr<sup>BLOG</sup> eHarmony®

match.com  
love is complicated. match is simple.



1991

NITRD was created.



Sergey Brin was  
a freshman in college.



Larry Page was still  
in high school.



Mark Zuckerberg  
was 6 years old.

A Day in Your Life:

20 Years Ago and Today

# Waking Up



# Turning on the Lights



# Heating and Cooling Your Home



# Home of Tomorrow

# Cleaning the House



nmsi  
[www.nmsi.co.uk](http://www.nmsi.co.uk)



# Making Phone Calls



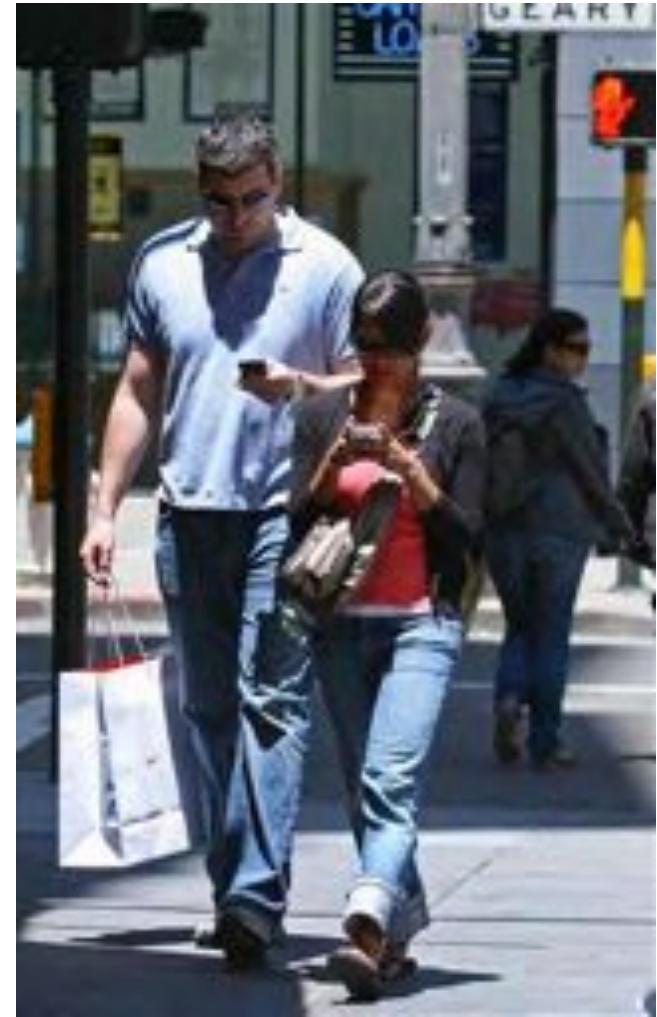
# Driving



# Cars of Tomorrow



# Walking

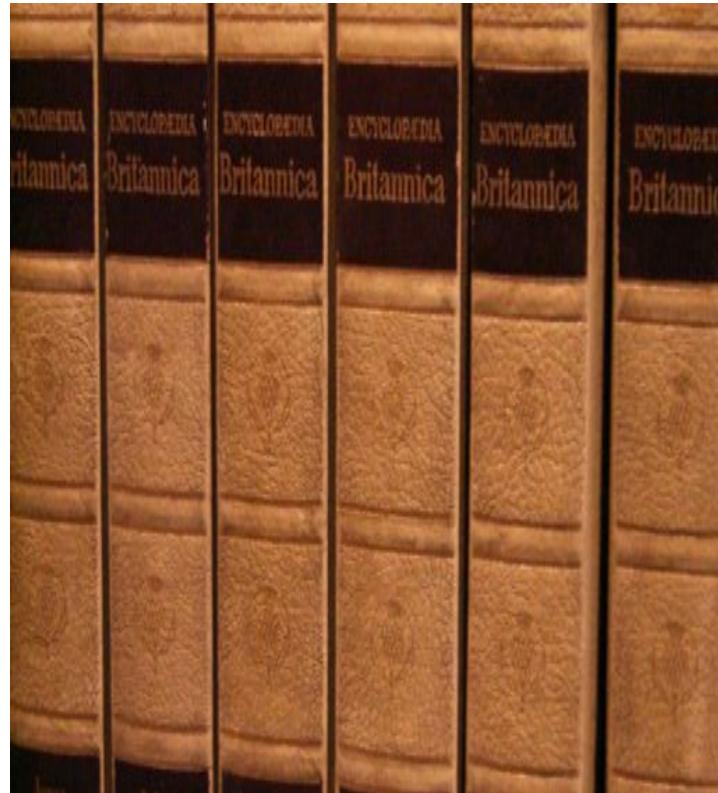


# Navigating



# Searching for Information

“Look it up.”



“Google it.”



# Thinking



Pipelining:  
How can I  
maximize  
throughput and  
eliminate  
backtracking?

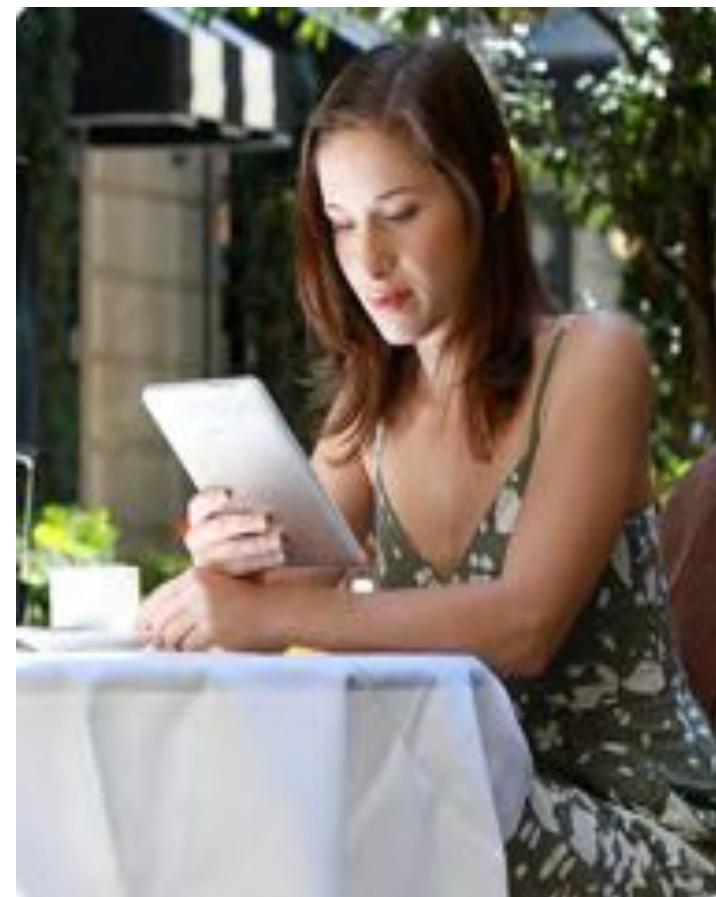
Computational Thinker

At Play

# Falling in Love



# Reading Books



# Listening to Music



# Watching Movies



# Shopping



The image shows a screenshot of an online shopping interface. At the top left is the **amazon.com** logo. To its right is the **eBay** logo. Below the logos is a promotional banner with the text "Save now on Valentine's Day gifts". Underneath the banner is a navigation bar with links for "Your Digital Items", "Your Account", and "Help". A large red circle highlights the "Cart" button, which is located in the middle of the bar. To the left of the "Cart" button is a "GO" button. To the right of the "Cart" button is a "Wish List" button.

# Watching Sports



8:41 PM [Share](#) [Comment](#) [Flag](#) Eli Passes

Eli Manning in the third quarter.  
Drug Milk/The New York Times

8:40 PM [Share](#) [Comment](#) [Flag](#) Who knew Manchester United's Rio Ferdinand was an N.F.L. fan?

Post comment

- Adriana Machado SECONDS AGO

Madonna Performing at Halftime loved Madonna
- bags275 SECONDS AGO

GE Capital gets billions from the govt each year at 0% to gamble with in Private Equity
- peterfeldner SECONDS AGO

Jon Pareles on Madonna's Halftime Show Madonna's set was awesome
- romeogr06 SECONDS AGO

GE - half of your jobs are in China & Mexico + give me a break...
- yoodoggggg SECONDS AGO

ge knows eye protection
- jwrb123 SECONDS AGO

Seinfeld, Madonna, Regis, The Donald... what year is this?
- demini LESS THAN A MINUTE AGO

i love seeing spoiled rich people fight to be first for a luxury item
- 944222768 LESS THAN A MINUTE AGO

LOL

# Visiting Grandma and Grandpa



# Visiting Grandma and Grandpa Tomorrow



# Falling Asleep



At Work

# Healthcare



# Agriculture



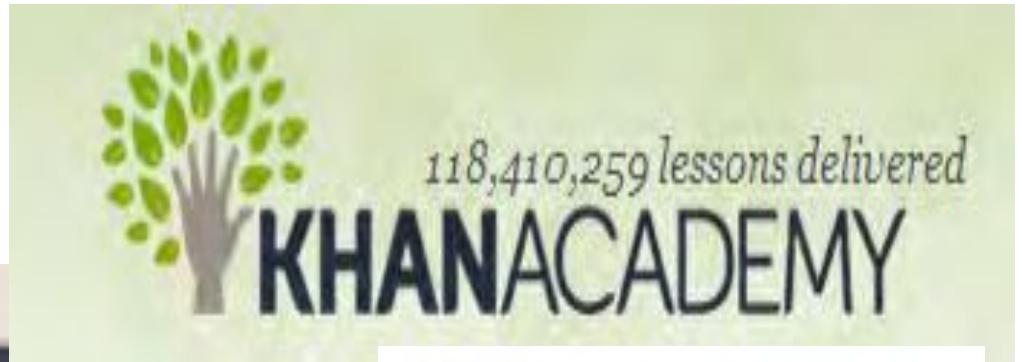
# Engineering



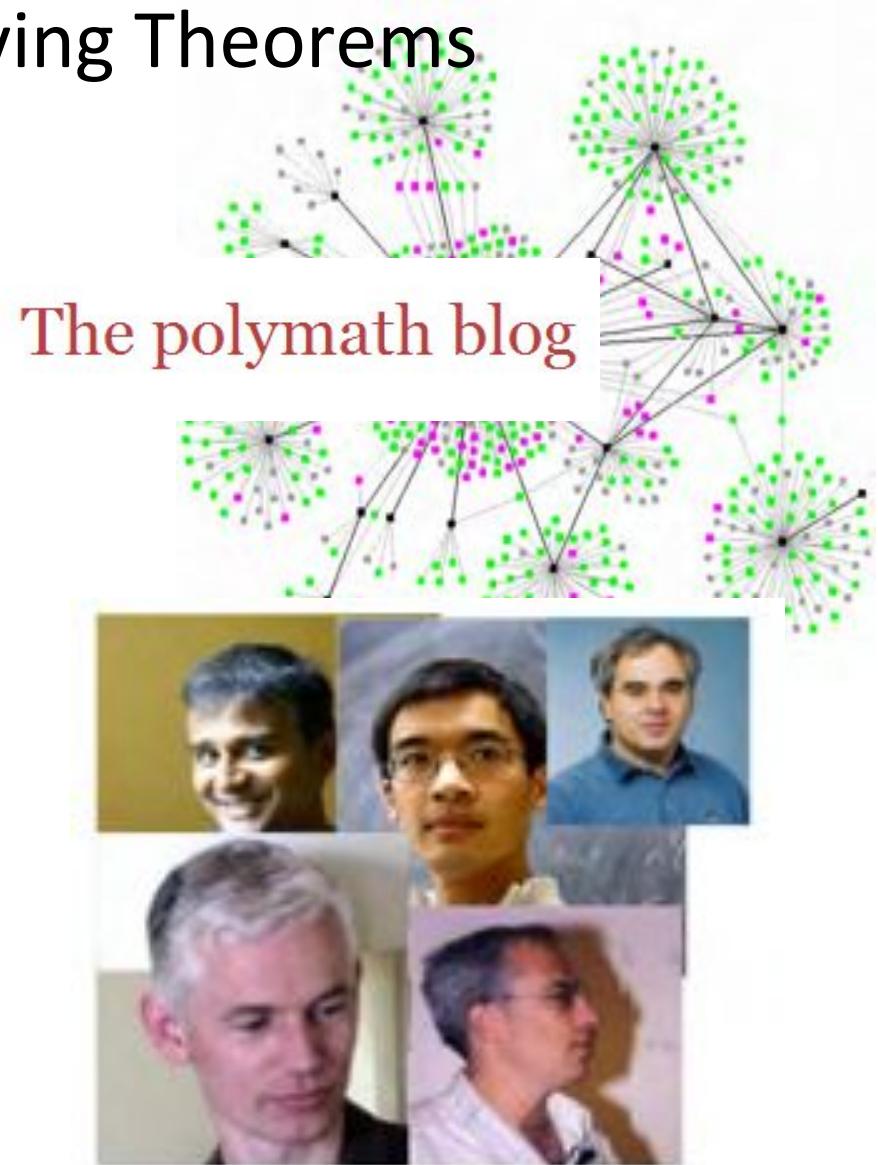
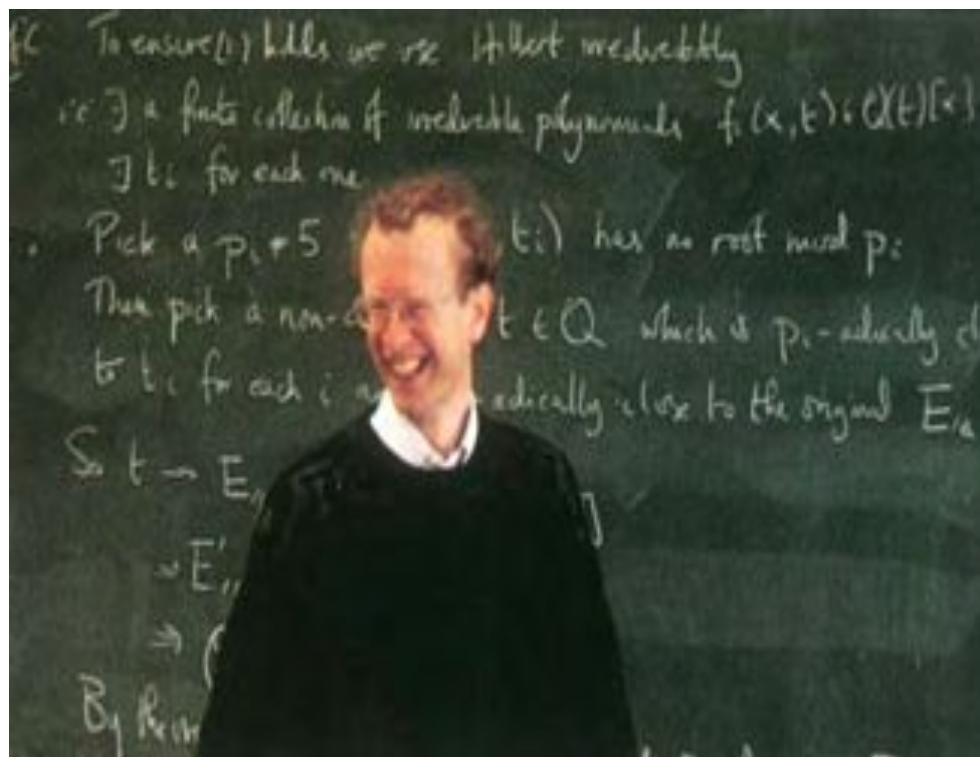
# Education



11973 [RF] © www.visualphotos.com

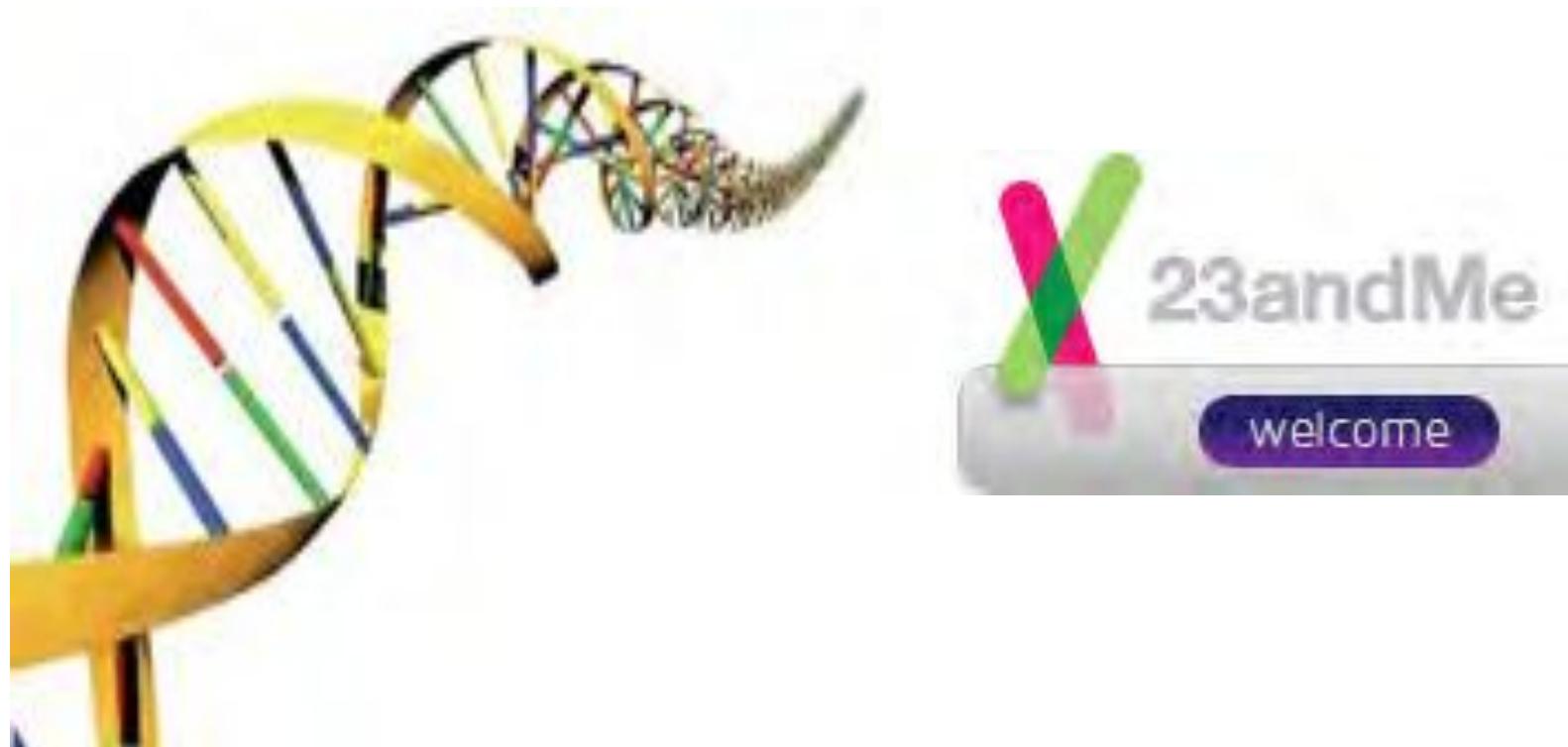


# Mathematics: Proving Theorems

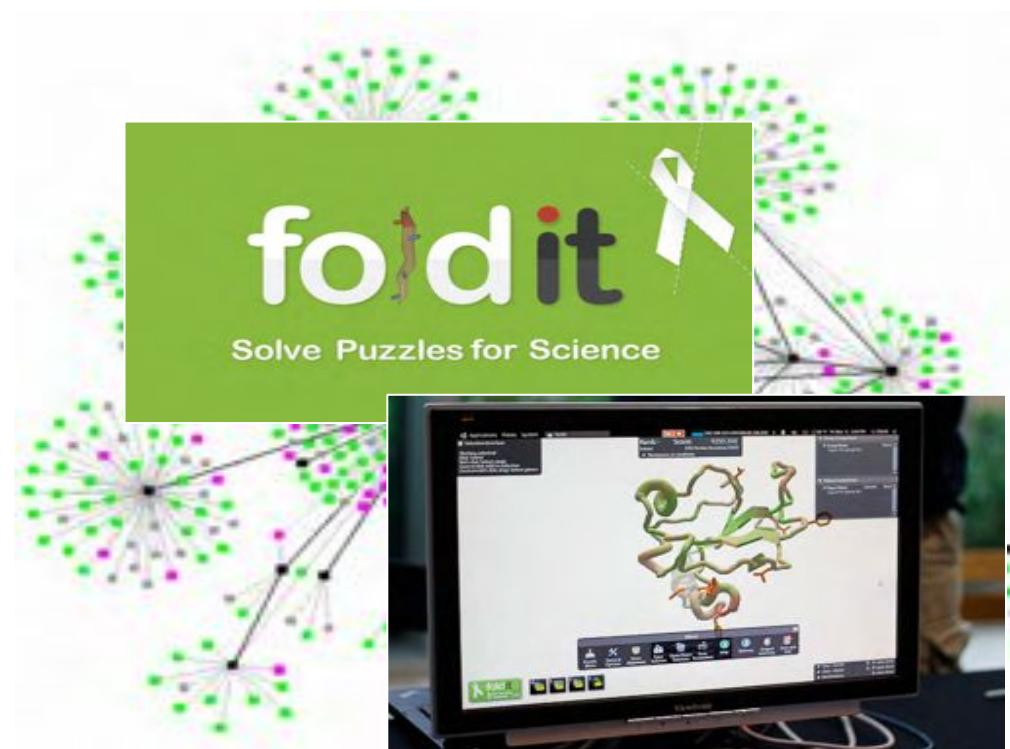
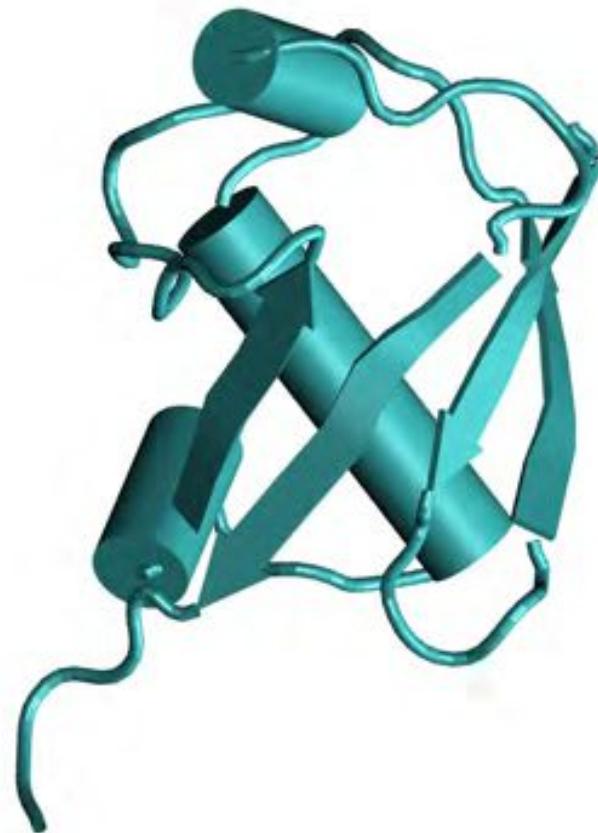


## Gödel's Lost Letter and P=NP

# Biology: Genetics



# Biology: Protein Structure





Energy



Agriculture



Healthcare



Education



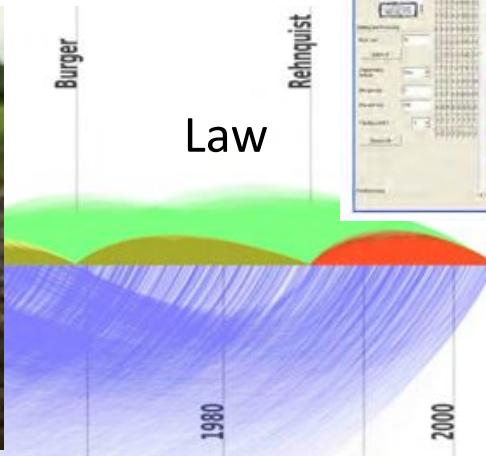
Entertainment

Information Technology  
Impacts Our Daily Lives  
and  
Every Sector of Society

Transportation



Law



Journalism



Science

Manufacturing

# 20 Years Ago

Chrome, Firefox, and Internet Explorer didn't exist.

Amazon, Facebook, Google, Netflix, Skype, Twitter, and YouTube  
didn't exist.

Android, Blackberry, iPod, iPhone, iPad, and Kindle  
didn't exist.

**Imagine your life without them!**

Advances and US leadership in  
information technology  
have changed our lives  
over the past 20 years.

Imagine what life will be like in another 20 years.

**Today, you will get a peek at the future.**

**Thank You!**

# Outtakes

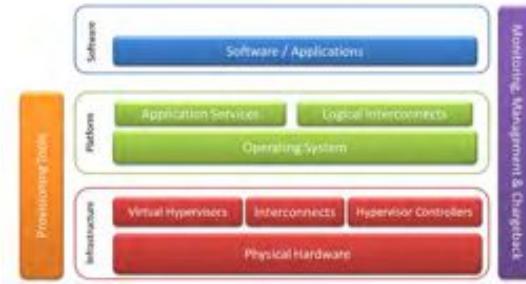
# Dating



# Boarding an Airplane



# Thinking



Computational Thinker